



MYERS CONTAINER LLC
CONTAINER MANAGEMENT SERVICES, LLC

49 CFR 178.2 (c) Notification for Myers, CMS and Other UN Packagings and UN Assembly Instructions for Non-Bulk MCC LLC and CMS Packagings

Routing Instructions: *This document must be passed along with the container within your facility, or to whom the packaging is transferred, and ultimately to the personnel responsible for shipping and closure. It must be used as a training document to complete closure of your container.*

Caution: *Empty Drums may be pressurized and extreme caution is necessary to prevent injury while removing the drum ring. Drums may become pressurized due to travel between low to high altitudes and / or changes of ambient temperatures.*

Requirements not met at the time of transfer

Due to conditions outside of the control of MCC LLC and CMS, the person to whom the packaging is transferred and the filler and the shipper, are notified that all closures may not be closed according to assembly instructions when the packaging is transferred to your inventory. The filler and ultimately shipper must verify that all closure specifications have been met (including those supplied during manufacturing, and if applicable, by a person to whom the packaging is transferred). When present (including and not limited to) the proper assembly of the following closure components must be verified:

UN Steel Drums – 12 Gauge Bolt ring with lugs and 5/8th inch nut and bolt (1A2 only), cover gaskets (including 3/8th inch sponge, 7/16th inch EPDM, 7/16th inch high density rubber, 0.265 inch black tubular SBR), 2” plugs, 3/4” plugs, plug gaskets (see page 4 for types of plugs and gasket combinations), all side fitting plugs (see 2” plug data in page 4) and specifications relating to bag liners (4 mil) and other liners (15 and 30 mil and a Pro55M liner). Liners which extend over the curl of the drum may only be used where specified by the design type and corresponding UN performance testing. 4 mil plastic bag liners may be used in UN packagings providing the liner does not interfere with the drum closure.

UN Poly Drums – All closures devices (including those where assembly requirements are embossed on the packaging), rings, all gaskets and plugs.

UN IBC Packagings (Rigid Composite and Metal) – Rings, covers, all gaskets, caps, plugs, and valve systems (including bolts and caps).

DOT Portable Tanks (DOT 57) – Also Known as Asset Tanks – Rings, covers, all gaskets, plugs and valve systems.

In addition to the above, if your design requires any additional or different specification closures or other requirements not met at the time of transfer of this container, a supplemental notification letter will be provided by a MCC LLC or CMS Account Manager or will be attached to the BOL.

It is the responsibility of the Shipper to determine the suitability of any Myers or CMS, LLC packaging for transportation of hazardous materials by Air. For shipments by Air, the shipper must refer to all applicable provisions (including the Hazardous Materials Table and 172.321) in 49 CFR, and take into account the characteristics material being shipped and the performance capabilities of the container sold to you.



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Product compatibility with the container is a shipper's responsibility. Any containers used for packaging of hazardous materials should be inspected prior to filling and shipment. Containers with obvious damage or deterioration should not be filled or shipped.

Type(s) and Dimensions of Closures (including gaskets) and other Components

It is the responsibility of the filler and / or shipper to confirm that the original closure components provided are utilized when assembling and closing this packaging (and if appropriate when added after manufacturing). These components are listed above for each packaging type. Utilization of different types of liners, bag liners, rings, bolts, nuts, covers, cover gaskets, caps, cap gaskets, plugs, plug gaskets or other components invalidate the performance rating.

MCC LLC and CMS produced Steel non-bulk packagings

UN Drum Assembly Requirements (closure instructions) for are attached to the Bill of Lading and consist of pages 3 and 4 of this notice. This notice is also found on our web site at:

<http://www.myerscontainer.com/>

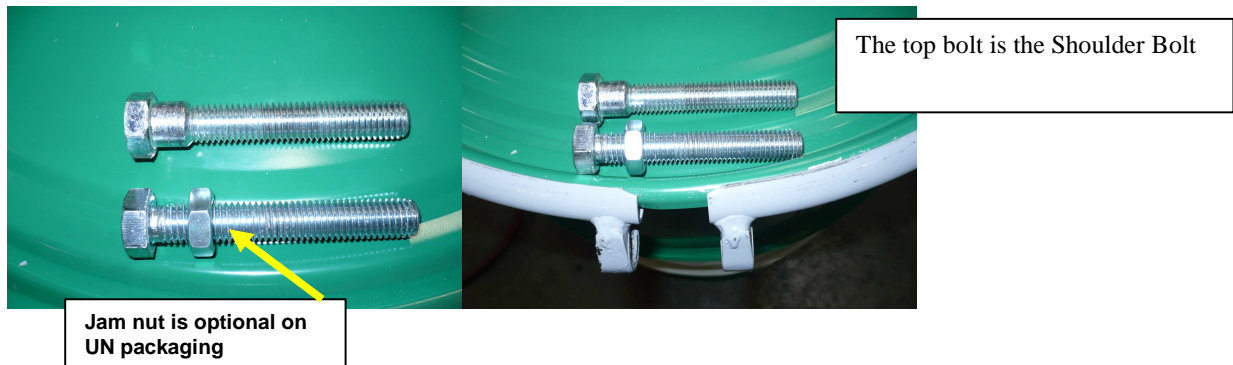
New Poly Drums, Reconditioned Poly Drums, New IBC's, IBC's supplied by continued qualification & packagings originally manufactured by other suppliers

Pages 1 and 2 of this notice, and assembly requirements from the original manufacturer (closure instructions) are attached to the BOL and are to be used in lieu of information found on pages 3 and 4 of this notice. If available, you will be provided the complete notice and assembly instructions from original manufacturer.

12 Gauge Bolt Ring Installation –

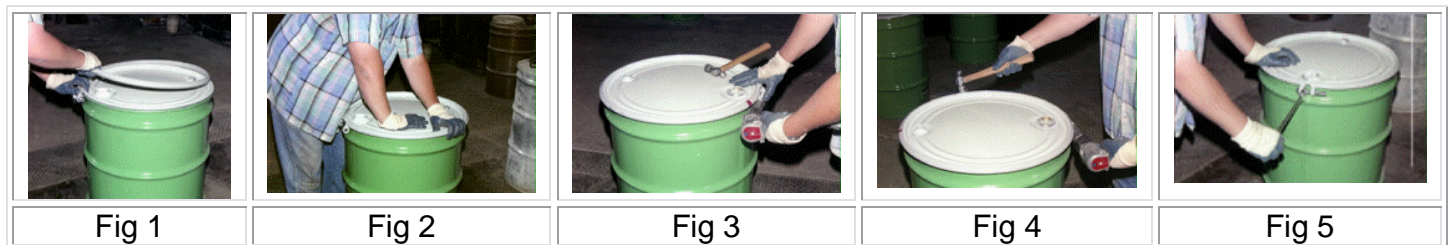
The photograph below illustrates the different bolt types that may be used on selected designs for MC LLC and CMS LLC packagings. The bolt on top is referred to as a shoulder bolt. The larger bolt shaft near the head is inserted into the unthreaded lug and is closed using the same technique used when using a threaded bolt. UN testing confirms that the shoulder bolt is equivalent to a conventional bolt with or without a jam nut. Both types of bolts may be used on MC LLC and CMS LLC designs inner changeably.

The jam nut is optional for all UN packaging and required for 7A packaging.



MCC LLC and CMS Produced - UN Drum Assembly Instructions

In order for your Myers Container or Container Management Services, LLC drum to safely perform to its rated ability, these assembly instructions need to be strictly adhered to. Any other method of assembly or the use of any drum components (rings, gaskets, or fittings) that are not specified in this design type will immediately invalidate the UN and DOT performance rating of the drum. The shipper must verify the appropriate use of a liner. A liner which extends between the gasket and the curl may only be used if UN Performance tests indicate a liner was used in testing.



1.0 12 Gauge Bolt Ring Installation

- a. Place the cover on the drum, making sure the cover gasket is seated against the lip of the drum opening (the curl) and the gasket recess on the cover. The gasket should not protrude beyond the cover or the drum curl.
- b. Place the bolt ring onto the drum. Make sure that the bolt ring is oriented so that the lugs are positioned below the top surface of the drum. You will be required to pound on the cover with your palm, or a rubber mallet, or use a head press to make sure it is centered on the drum curl. Check to see that the cover and drum curl are pinched together and within the recess of the ring.
- c. Thread the bolt into the lugs, and tighten to a minimum of 60 ft-lb of torque. It is necessary to hammer around the circumference of the ring while torquing in order to further seat the head onto the drum. Continue hammering on the ring circumference and torquing the bolt until the torque is stabilized at 60 ft-lb, and does not loosen when further hammering on the ring circumference is performed. The ring ends must not touch when the ring has been torqued. If a jam nut is used on bolts having threads up to the head (see photo on page 2), it must be placed on the bolt, between the drum ring lugs, and tightened against the un-threaded lug. **As previously specified, the jam nut is optional.** A Shoulder Bolt does not require a Jam Nut.
- d. It may be necessary to check the torque and tighten if necessary prior to shipping.

16 Gauge Bolt Ring Closure - See page 5 - Design 5556



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MCC LLC and CMS Produced - UN Drum Assembly Instructions

2.0 Fitting Installation

The table below shows the as tested torque that must be applied to each drum fitting to assure proper container performance. (All measurements are in foot-pounds.)

| | Type I - Tri-sure ® Octagon Base, Round Head Plug inserted in ® Tri-sure Flange | | | | | | Type II – Rieke Serrated Base, Hexagon Head Plug | | |
|---------------------------------|--|--------------------------------|-----------------------------|---------------------------|--------------------------------|------------------------|---|------------------------------------|------------------------|
| Plugs | Steel | Steel | Self-Gasketing Polyethylene | High Density Polyethylene | Polypropylene & Nylon | Polypropylene & Nylon | Steel | Steel | Nylon |
| Gasket Material ----- Plug Size | Rubber (Buna-N and EPDM) | Poly-Irradiated (Polyethylene) | None (Integral Gasket) | Rubber (Buna-N and EPDM) | Poly-Irradiated (Polyethylene) | Rubber (Buna and EPDM) | Buna-N and E.P.T. Gasket | Irradiated L.D. Poly (Poly) Gasket | Poly and E.P.T. Gasket |
| 2" Closure Torque | 20 | 30 | 12 | 15 | 30 | 20 | 30 | 40 | 20 |
| 3/4" Closure Torque | 12 | 20 | 5 | 8 | 8 | 8 | 15 | 20 | 9 |

3.0 Cap Seals

Cap seals must be installed by filler when non-metal flanges are used. For all fitting systems, the shipper is responsible to assure that fittings are properly torqued before shipment.

4.0 Bag Liners and Liners

a. If a bag liner is required by the drum design type it must be installed into the drum and the top tied closed in a horse-tail fashion before installing the drum cover and ring. During testing, the MCC LLC UN Test Lab top tied and secured the horse-tail by removing air to the extent possible, twisting and folding the horse-tail and securing with ordinary duct tape.

b. If a liner is required by the drum design type it must be installed into the drum, extended over the top drum curl, making sure there are no overlaps in the liner as it goes over the drum curl.



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5.0 Supplemental Closure Requirements

Designs 0801, 1001, 1606, 3011, 5532, 5585, 8501 and G5501

These designs are only 7A Compliant with a 4 mil Polyethylene (LDPE) Bag Liner installed as described in 4.0 a (above). LDPE Liners up to 10 mil thickness will also meet this requirement providing the bag can be installed and top tied as described above. Liners for the 55 gallon size may be cut to accommodate smaller sized packagings, and must be inspected to assure that the liner is not accidentally punctured. This liner may be installed during manufacturing or by the filler / shipper of the packaging.

Design 5556 – Narrow Open Head 21”

For qualification as a UN packaging, this drum must utilize the 16-gauge bolt ring (utilizing a 5/16” Rivet Nut Bolt Ring - bolt threading into a lug which encloses a nut) provided with the drum order. The bolt ring must be closed tight in such a manner as to prevent the nut from pulling out of the lug and to a point of less than 10 foot-pounds. The bolt ring manufacturer has advised MCC LLC that a torque of 10 foot-pounds or more must not be exceeded. Design 5556 was tested and passes UN Testing at 7 psi.

Design 5559

For qualification as a UN packaging, this design requires a 30 mil liner to be installed during Manufacturing or by the filler / shipper. The liner must be installed as prescribed in 4.0 b.

Design 5577 and 5583

For qualification as a UN packaging, this design requires a 15 mil liner to be installed during Manufacturing or by the filler / shipper. The liner must be installed as prescribed in 4.0 b.

Design 5592

This design requires a Pro55M Liner. The liner must be installed as prescribed in 4.0 b, and the cover must be assembled with a head press.

Design R5503

Follow the instructions in 1.0 above and torque to 75 ft. pounds instead of 60 ft pounds.

These instructions for container closure are based on the closure methods used to enable the packagings sold to you to pass the United Nations test requirements as outlined by the UN marking on the package. The UN Marks are found on the side of the packaging.

A UN Test Summary verifying that the packaging sold to you has met the testing requirements is available upon request.